

CLAIMS

1. An oxidation-resistant rare earth metal-based magnet powder, characterized in that it has on its surface an adhesion layer containing a pigment as a primary component.

2. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1, characterized in that said pigment is an inorganic pigment.

3. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 2, characterized in that said inorganic pigment is carbon black.

4. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1, characterized in that said pigment is an organic pigment.

5. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 4, characterized in that said organic pigment is an indanthrene based pigment or a phthalocyanine based pigment.

6. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1, characterized in that the average particle diameter (major axis diameter) of said pigment is in a range of 0.01 μm to 0.5 μm .

7. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1, characterized in that the average particle diameter (major axis diameter) of said rare earth

metal-based magnet powder is not larger than 200 μm .

8. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 7, characterized in that said rare earth metal-based magnet powder is an HDDR magnet powder.

9. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1, characterized in that it has said adhesion layer adhered to the outermost surface, with one or more interposed layers of coating films formed on the surface of said rare earth metal-based magnet powder.

10. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 9, characterized in that said coating film formed on the surface of said rare earth metal-based magnet powder is a coating film made of an inorganic phosphoric acid compound.

11. The oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 9, characterized in that said coating film formed on the surface of said rare earth metal-based magnet powder is a coating film made of a metal.

12. A method for producing an oxidation-resistant rare earth metal-based magnet powder having on its surface an adhesion layer containing a pigment as a primary component, characterized in that the method comprises mixing a rare earth metal-based magnet powder with a treating solution containing the pigment, and then drying the rare earth metal-based magnet powder having adhered to the surface thereof the treating

solution containing the pigment.

13. The production method as claimed in Claim 12, characterized in that the method comprises mixing a rare earth metal-based magnet powder with a treating solution containing the pigment, and then obtaining by filtration the rare earth metal-based magnet powder having adhered to the surface thereof the treating solution containing the pigment.

14. The production method as claimed in Claim 12, characterized in that the pigment accounts for 5 wt% to 33 wt% of said treating solution containing the pigment.

15. The production method as claimed in Claim 12, characterized in that said treating solution containing the pigment comprises an organic dispersing medium.

16. A method for producing an oxidation-resistant rare earth metal-based magnet powder having an adhesion layer containing a pigment as a primary component adhered to the outermost surface with one or more interposed layers of coating films formed on the surface of the rare earth metal-based magnet powder, characterized in that the method comprises mixing a rare earth metal-based magnet powder having one or more layers of coating films formed on the surface thereof with a treating solution containing the pigment, and then drying the rare earth metal-based magnet powder having adhered to the outermost surface thereof the treating solution containing the pigment.

17. A compound for rare earth metal-based bonded magnet,

characterized in that it comprises an oxidation-resistant rare earth metal-based magnet powder as claimed in Claim 1 and a resin binder.

18. A rare earth metal-based bonded magnet, characterized in that a compound for rare earth metal-based bonded magnet as claimed in Claim 17 is used and shaped into a predetermined shape.

19. A method for producing a rare earth metal-based bonded magnet, characterized in that the method comprises using and shaping a compound for rare earth metal-based bonded magnet as claimed in Claim 17 into a predetermined shape in a process including at least a compression molding step, followed by heating and hardening the molding if necessary.

20. The production method as claimed in Claim 19, characterized in that said compression molding is performed by pressing under a pressure of 0.1 GPa to 1 GPa.